Application No. 09/847,605 Amendment dated July 9, 2004 Reply to Office Action of June 10, 2004 Attorney Docket No. DP-302846

## Amendments to the Specification

Please add the following new paragraphs after the paragraph ending on line 10 of page 6.

- --FIG. 5 is a perspective view of an alternate embodiment of an interconnect in accordance with the invention.
  - FIG. 6 is an enlarged view of a portion of a first section of FIG. 5.
  - FIG. 7 is an enlarged view of a portion of a second section of FIG. 5.
  - FIG. 8 is an enlarged view of a portion of a third section of FIG. 5.
  - FIG. 9 is an enlarged view of a portion of a fourth section of FIG. 5.
- FIG. 10 is a perspective view of yet another embodiment of an interconnect in accordance with the invention.
  - FIG. 11 is an enlarged view of a portion of a first section of FIG. 10.
  - FIG. 12 is an enlarged view of a portion of a second section of FIG. 10.
  - FIG. 13 is an enlarged view of a portion of a third section of FIG. 10.
  - FIG. 14 is an enlarged view of a portion of a fourth section of FIG. 10.
  - FIG. 15 is an enlarged view of a portion of a fifth section of FIG. 10.
  - FIG. 16 is an enlarged view of a portion of a sixth section of FIG. 10.
  - FIG. 17 is an enlarged view of a portion of a seventh section of FIG. 10.
- FIG. 18 is a schematic view of a portion of a fuel cell stack showing an interconnect having a yielding layer in accordance with the invention.--

Please add the following two new paragraphs after the paragraph ending on line 27 of page 8.

--FIGS. 5-9 illustrate an embodiment of an interconnect 30 comprising gas flow passages 32 and standing surfaces 34 providing a unique flow passage geometry of varying cross-section and width across the interconnect sufficient to effect local variations in flow direction, velocity, and turbulence. On the anode side of the fuel cell,

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the variations in flow direction, velocity, and turbulence are designed to affect fuel utilization across the plane of the cell as fuel concentration changes and to enhance transport of reaction products. On the cathode side of the fuel cell, the variations in flow velocity and turbulence, and change in surface area are designed to affect heat transfer to the cathode air as the temperature of the cathode air varies across the plane of the fuel cell. In FIG. 5, the gas flow passages 32 and standing surfaces 34 are arranged to provide four sections across the interconnect, each section having a progressively denser disposition of standing surfaces 34. FIG. 6 provides an enlarged view of a portion of the first section 36 of FIG. 5 showing the placement of gas flow passages 32 and standing surfaces 34. FIG. 7 provides an enlarged view of a portion of the second section 38 of FIG. 5 showing the placement of gas flow passages 32 and standing surfaces 34. FIG. 8 provides an enlarged view of a portion of the third section 40 of FIG. 4 showing the placement of gas flow passages 32 and standing surfaces 34. FIG. 9 provides an enlarged view of a portion of the fourth section 42 of FIG. 5 showing the placement of gas flow passages 32 and standing surfaces 34. While the anode gas passages are illustrated, it is understood that this concept is applicable to both anode and cathode gas passage geometry.

FIGS: 10-17 illustrate yet another embodiment of an interconnect 44 having gas flow passages 46 and standing surfaces 48 arranged to provide seven sections across the interconnect, each section having a progressively denser disposition of standing surfaces 48. Further, standing surfaces 48 are disposed at varying angles to one another to further affect flow direction, velocity and turbulence. FIG. 11 provides an enlarged view of a portion of the first section 50 of FIG. 10 showing the placement of gas flow passages 46 and standing surfaces 48. FIG. 12 provides an enlarged view of a portion of the second section 52 of FIG. 10 showing the placement of gas flow passages 46 and standing surfaces 48. FIG. 13 provides an enlarged view of a portion of the third section 54 of

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FIG. 10 showing the placement of gas flow passages 46 and standing surfaces 48. FIG. 14 provides an enlarged view of a portion of the fourth section 56 of FIG. 10 showing the placement of gas flow passages 46 and standing surfaces 48. FIG. 15 provides an enlarged view of a portion of the fifth section 58 of FIG. 10 showing the placement of gas flow passages 46 and standing surfaces 48. FIG. 16 provides an enlarged view of a portion of the sixth section 60 of FIG. 10 showing the placement of gas flow passages 46 and standing surfaces 48. FIG. 17 provides an enlarged view of a portion of the seventh section 62 of FIG. 10 showing the placement of gas flow passages 46 and standing surfaces 48.—

Please add the following new paragraph after the paragraph ending on line 9 of page 9.

--FIG. 18 schematically depicts a portion of a ceramic fuel cell stack 64 including ceramic fuel cells 66 having anodes 68 and cathodes 70 in relation to interconnects 10 in accordance with the invention. Interconnects 10 have disposed thereon a yielding layer 72 which geometrically conforms to the irregular surfaces on the cathode and anode thereby substantially reducing contact resistance.--